14 Best Practices: Inventory Management Techniques

F. Curtis Barry & Company
Warehouse | Systems | Inventory Consultants

www.fcbco.com/services 804-740-8743

14 Best Practices: Inventory Management Techniques

By F. Curtis Barry & Company

Inventory management and forecasting are strategic issues. Companies that recognize this fact can typically provide higher levels of service to their customers and post higher profits.

Developing a comprehensive inventory strategy involves a number of departments — including fulfillment, marketing, and merchandising — as well as inventory control. It also involves implementing best practices for your inventory management techniques. Here are 14 best practices that will most likely benefit your business the most.

1. **Synchronize promotions**

   Successful strategic inventory management relies on tying creative and marketing plans to merchandising plans. Marketers and merchants need to develop companywide planning calendars and projections for all promotions in all channels — catalog, online, e-mail, stores, space ads. Merchants and the inventory control group then plan product purchasing, availability, and receipts to support these events.

   There are three aspects to this planning. First, the marketing department compiles and continually updates the marketing calendar. Second, the marketing team plans the expected orders by week for the promotions. Third, the inventory control and merchandising teams plan the demand in units for the promotions.

   Often it's e-mail campaigns that trip up multichannel merchants. The campaigns may appear on the marketing calendar, but all too frequently no one decides which items will be promoted until four to eight weeks before the actual date of the promotion. By then product has been ordered and may already have arrived in the distribution center. This lack of planning can cause contention between channels for best-sellers, leading to customer frustration and backorders.

2. **Revamp the organizational structure**

   To implement more-streamlined inventory practices, many companies have adopted a new organizational structure: The merchandising department handles product selection, sourcing, and development and works with the creative department on promotions. The inventory control group is primarily responsible for overseeing the prior season's category and item history, working with the merchants on assortment planning, managing the inventory, forecasting, reordering, receipt planning, post-mortem evaluation of item performance, and vendor communication and compliance. Merchandising may still place initial purchase orders, but in most cases inventory control will pick up relationships with vendors and do the necessary reordering and stock balancing.

3. **Take a longer view of item planning**

   Rather than planning items one promotion at a time, plan an item across promotions. Doing so enables you to plan receipts in line with promotions, reduce backorders, make minimum order requirements, and significantly reduce planning time.

4. **Enforce vendor compliance**

   The inventory control team is generally responsible for administrating vendor compliance policies because they communicate most frequently with the vendors. One of the basic goals of a compliance program is to push inspection up the supply chain. Problems can be more readily corrected if they are identified before product ships to the distribution center rather than after arrival at the DC. Compliance policies should include routing guides, item specification sheets, retail and direct packaging, accounting and paperwork standards, company contact lists, chargeback policies and schedules, and advance shipment notice (ASN) and systems standards.

5. **Track key inventory metrics**

   An industrial engineering axiom states, "What hasn't been measured, can't be improved". From an inventory perspective, the metrics are the same for online sales as for catalogs, although the forecasting systems requirements for Internet promotions may be different from those for catalog inventory. The metrics include

   - top-line and bottom-line growth
   - maintained gross margin
   - initial customer order fill rate (see chart)
   - final fill rate/returns/cancellations
   - gross margin return on investment (GMROI)
   - turnover
   - cost of backorders
   - age of inventory
   - measures of overstock
   - write-downs as a percentage of costs.

   Key metrics for stores would include

   - top-line and bottom-line growth
   - comparable-store sales (year over year)
   - maintained gross margin
   - turnover
   - GMROI
   - weeks of supply
   - markdowns/margin loss from write-downs
   - age of inventory
   - sell-through percent
   - stock-to-sales ratios.

See some of the direct metrics at the end of this article.

6. **Select the right systems**

At the heart of capturing these metrics are the retail and direct systems. Keep in mind that metrics produced by systems will be used for dashboard reporting to top management and that management will need drill-down capability to see details at lower levels of reporting such as merchandise divisions.

Ideally a multichannel merchant wants to implement channel-appropriate merchandise planning, forecasting, trending, and performance systems now. In the real world, many multichannel companies are still working through what their requirements are specifically for e-mail and Internet forecasting functions. Analyze your Internet demand and determine how different it is from catalog demand, and develop systems functions accordingly.

7. Master the art of master scheduling

A system with master-scheduling capability takes into account all promotional plans by item. It will also add demand projections by week, subtract returns and cancellations, add in the expected receipts and plot delivery dates for purchase orders (POS), and then calculate whether an item is running short or overstocked across channels. Because the calculations are by week, you can see where more on order is needed or the effect of delaying Pos on the net requirements.

To acquire a system with this capability, management needs to make a significant investment. In a recent client study the costs ranged from $400,000 to $1.5 million. Software companies are looking to develop full-fledged retail, Internet, and catalog planning and inventory management functionality; no one vendor has all the functions needed today.

8. Adhere to exception reporting

A natural outgrowth of systems with master scheduling, exception reporting helps rebuyers and inventory managers know where to take action without their having to review every item every week in detail. Retail and direct inventory systems both use exception reporting. Types of exception reports include:

- management reports (for instance, top 50/bottom 50 in demand)
- product characteristic reports (e.g., all items in a certain fabric across departments)
- POs needed based on stock-out calculations, on hand and on order, and projected demand with item/vendor lead time
- ranking reports for returns, cancellations, gross margin, and liquidation
- forecast variance plan to actual
- slow sellers and candidates for liquidation
- new vs. repeat performance
- imported vs. domestic product.

9. Identify lost demand

To capture and plan for phantom, or shadow, demand, catalogers must record order information in the contact center. For Web sales, analytics systems are starting to have the capability to report when items move in and out of a customer's order process and shopping cart. Once you've captured the metrics, you need to report to the merchants the consequences of being out of stock in cases when customers substituted items for those that were sold out. Then the numbers need to get into merchandise planning for the next season. Catalogs have found that best-sellers that were out of stock might have been able to sell an additional 10%-30% based on phantom demand.

10. Plan by assortment

Preseason assortment planning of categories and products relies on the past sales performance of items or, for items not sold in the past, similar product, along with item availability. For catalog assortment planning also space utilized by product and category. Retail assortment planning is top down by category and bottom up by item.

11. Track inbound receipts

Inbound tracking of receipts not only benefits the fulfillment operation but also helps inventory management. Smaller companies often lack this capability, and it can really hurt their DC planning and their customer service. But many freight consolidators and carriers, including United Parcel Service and FedEx, offer tracking services as do freight consolidators like DM Transportation. Or you can implement inbound systems so that vendors send ASNs when purchase orders have shipped. UPS and FedEx both provide this service.

12. Create coverage reports

Coverage is defined as having sufficient quantities of products already in the DC when a promotion is in-home. Companies need to develop coverage reports to show how much is in DC vs. the initial demand projected. There are always some games played in this area with management. Because 50% to 70% of orders related to a catalog drop take place in the first four weeks after the drop, if you don't have sufficient quantities of a product by the time the catalogs hit mailboxes, you're going to create backorders early in the promotion.

Merchandising and inventory control need to follow up closely with vendors a couple of weeks in advance of the ship date to ensure higher initial coverage by the time first orders arrive. As for the initial coverage rate, defined as the quantity of units in stock by product and SKU before a catalog mails or an e-mail promotion is sent, you should have sufficient coverage for the first two to three weeks in all SKUs, but most businesses are well below these levels.

See the actual initial customer order fill rate graph for an apparel company at the end of this article.

13. Balance understock/overstock

What is the balance point between the cost of being out of stock on an item ($7-$12 per unit on backorder, according to our proprietary studies) and the cost of overstock (margin loss you experience from liquidating categories of product)? Chief financial officers often try to identify this at a top level. Merchants and inventory control experts need to identify how much risk lies in being under- or overstocked as they do the merchandise planning. New items, exclusives, and imports obviously have much more risk. Exclusives and imported merchandise may also have higher minimum quantities.

14. Optimize your SKUs

SKU optimization crosses finance, DC, and inventory lines. In the past decade, many catalogs expanded the range of color and size SKUs for individual items, and sales increased accordingly. Merchandise with high SKU counts (bedding, shoes, apparel) creates the biggest challenges. Now companies recognize that the cost of fulfillment (labor, space) and liquidation for slow-moving items can be high compared with their actual sales. SKU profitability or optimization needs to be determined with fully loaded costs (advertising costs, fulfillment costs, overhead, etc

BEST PRACTICES IN INVENTORY METRICS

Unless a company has a proprietary credit program, inventory will generally be its largest balance-sheet asset - and knowing standard inventory metrics is the key to protecting that asset. Here are some best-practice standards:

Initial Order Fill Rate

Customer orders shipped complete
Advanced fashion: 70%-80%
Reorderable, basic apparel: 80%-90%
Gifts/housewares: 85%-95%
Business products: 98%-100%

Final Order Fill Rate

Of the orders taken over the life of a catalog, the percentage of customer orders ultimately shipped 100% complete.
Advanced fashion: 90%-95%
Reorderable, basic apparel: 95%-99%
Gifts/housewares: 96%-100%
Business products: 100%

Return Rates

Percentage of gross demand that is returned by the customer regardless of the reason
Advanced fashion: 20%-40%
Reorderable, basic apparel: 10%-20%
Gift/housewares: 2%-4%
Business Products: 1%-3%

Cancellation Rate

The percentage of customer demand that is canceled by either the customer (from backorders) or the company (permanently out of stock)

Apparel: 2%-5%
Gifts/housewares: 2%-4%
Business products: 1%

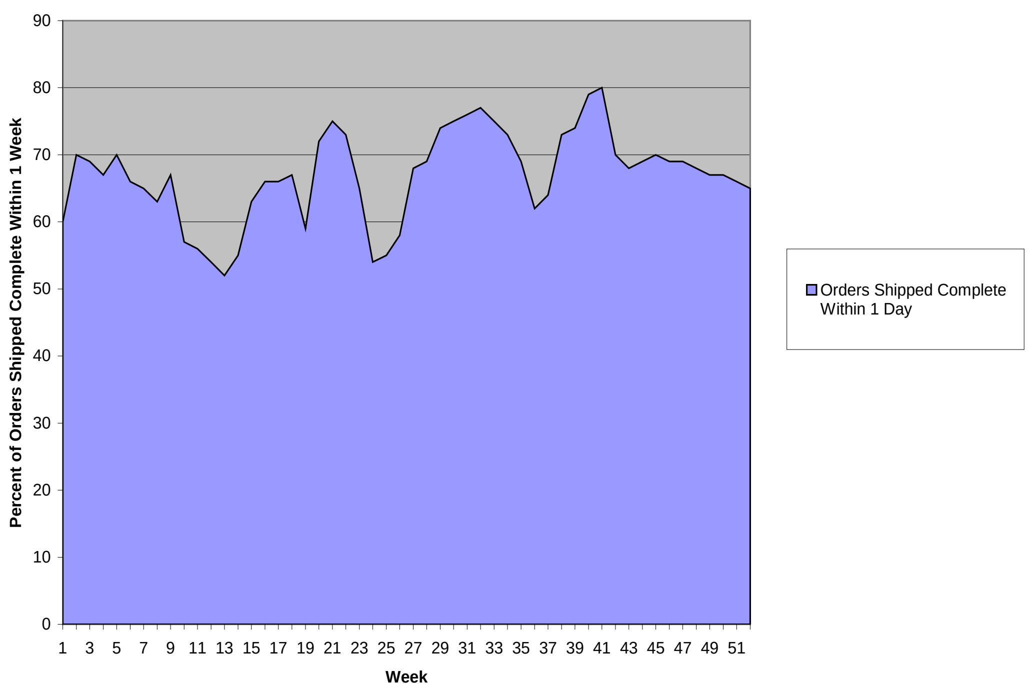
Inventory Turnover Rate

The annual cost of goods sold divided by the average inventory, at cost

Apparel: 3-5
Gifts/housewares: 4-6
Business products: 6-8

Gross Margin Return on Investment (GMROI)

You'll need to know the turnover to measure your gross margin return on investment: maintained margin (decimal) x turnover = GMROI. Our studies indicate that good performance is over 2.00. To see how even small improvements in either gross margin or turnover can improve results, plug in your stats. Improve one or the other by a moderate amount and see how the GMROI improves.--CB



Most Catalogs don't measure and report a weekly order fill rate; instead they only measure initial item fill rate or backorders. Initial order fill represents what percentage of the orders shipped complete (all items on an order) in the DC's order turnaround time standard. This is an excellent measure of customer service.

